CONSTRUCTION DETAILS

A. INSTALL 27' STEEL POLE WITH TWIN 50'-70' MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND PEDESTRIAN EDUCATION SIGN AS SHOWN. (NOTE: 1- 3, 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND.)NOTE: POLE MUST BE CUT TO 21' HEIGHT AND 70' MAST ARM CUT TO 66' LENGTH. CLEANED, GALVANIZED AND CAPPED.)

B. INSTALL 27' STEEL POLE WITH 60' MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON, PEDESTRIAN EDUCATION SIGN, 1-2" WEATHERHEAD, SERVICE CONTROL AND DISTRIBUTION EQUIPMENT AND 1 1/4" WEATHERHEAD AS SHOWN. (NOTE: 1-2", 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND AND 1-3", 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND.) (NOTE: POLE MUST BE CUT TO 21' HEIGHT. CLEANED, GALVANIZED AND CAPPED.)

C. INSTALL 14' BREAKAWAY PEDESTAL POLE, TRAFFIC AND PEDESTRIAN SIGNAL HEADS, PUSHBUTTON AND PEDESTRIAN EDUCATION SIGN AS SHOWN. (NOTE: 1-3", 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND.)

D. INSTALL 10' BREAKAWAY PEDESTAL POLE, PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND PEDESTRIAN EDUCATION SIGN AS SHOWN. (NOTE: 1-3". 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND.)

E. INSTALL NEMA SIZE "6" BASE-MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT AS SHOWN. (NOTE: 2-2". 90° POLYVINYL CHLORIDE (SCHEDULE 80) BEND AND 2-4". 90° POLYVINYL CHLORIDE (SCHEDULE 80) BENDS.)

F. INSTALL HANDHOLE (FRAME AND COVER) FOR TRAFFIC SIGNAL EQUIPMENT.

G. INSTALL HANDHOLE AND TWO (2) RUNS OF 4" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED) TO PROPOSED BASE-MOUNTED CABINET.

H. INSTALL 6' X 30' LOOP DETECTOR ENCASED IN 1/4" FLEXIBLE TUBING QUADRUPOLE TYPE (3-6-3).

J. INSTALL 1" GALVANIZED STEEL ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).

K. INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).

L. INSTALL 4" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (SLOTTED).

M. INSTALL 2" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED).

N. INSTALL 3" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED).

O. INSTALL 4" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED).

P. INSTALL PAVEMENT MARKING AS SHOWN.

Q. USE NEW HANDHOLE INSTALLED BY THE LIGHTING CONTRACTOR.

R. PROPOSED OVERHEAD ELECTRICAL SERVICE TO BE INSTALLED BY CONNECTIV.

S. EXISTING OVERHEAD INTERCONNECT CABLE TO BE REMOVED AND REPLACED. (SEE WIRING DIAGRAM)

T. NEW SIDEWALK AREA 10' X 15' FOR STANDING AREA INSTALLED BY ROAD CONTRACTOR.

U. INSTALL 6' X 6' LOOP DETECTOR ENCASED IN 1/4" FLEXIBLE TUBING (4 TURNS).

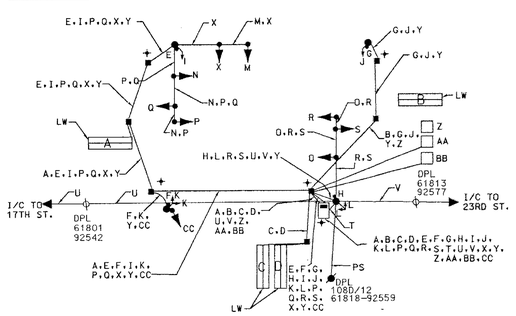
PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 & 5	R G	R G	R	R G	R G	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1 & 6 OR PHASE 2 & 5									DW	DW	DW	DW	DW	DW
PHASE 1 & 6	G C	G C	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 CHANGE	G Y	G Y	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G G	G G	G	R	R	R	DW	DW	DW	DW	DW	DW
5 CHANGE	R	R	R	G Y	G Y	G	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	G	G	G	DW	DW	WK	WK	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

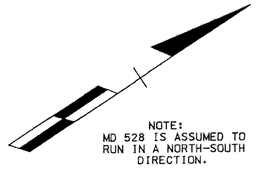
WIRING KEY

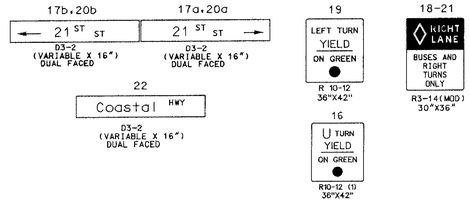
A B C D AA BB	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) (ALUMINUM SHIELDED)
E F G H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I J	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
K L M N O	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
P R S V X CC	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
T	3-WIRE ELECTRICAL CABLE (NO. 4 A.W.G.)
U V	12-PAIR, VOICE GRADE INTERCONNECT CABLE (NO 19 AWG) (SELF-SUPPORTING)
Y	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
LW	LOOP WIRE (NO. 14 A.W.G.)
PS	PROPOSED OVERHEAD SERVICE TO BE INSTALLED BY CONNECTIV
+	GROUND ROD

WIRING DIAGRAM

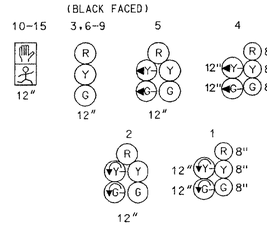


PROPOSED SIGNS

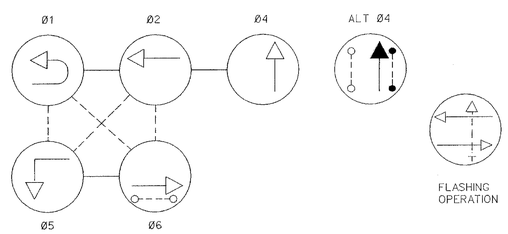




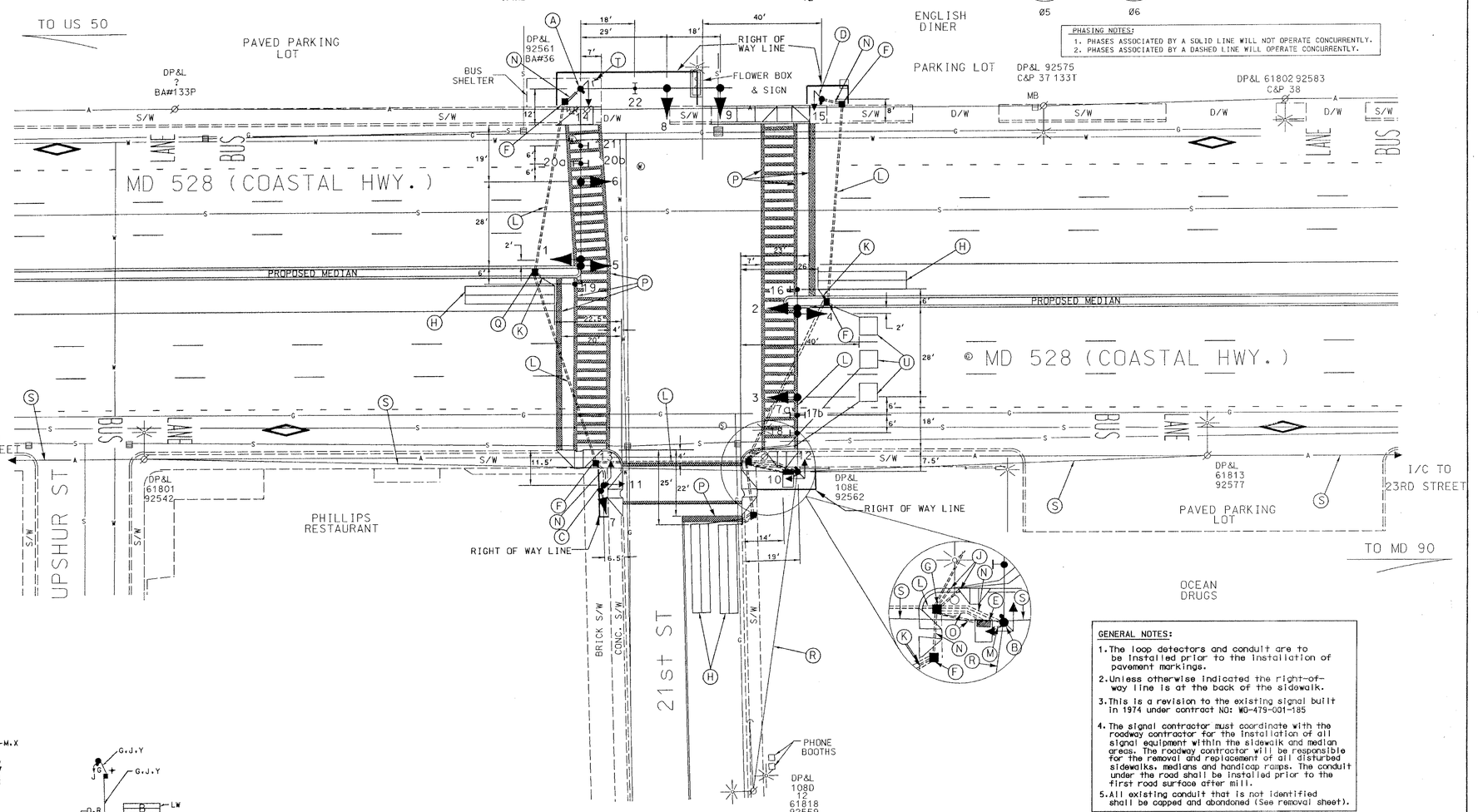
PROPOSED SIGNALS



NEMA PHASING



PHASING NOTES:
1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.



GENERAL NOTES:

1. The loop detectors and conduit are to be installed prior to the installation of pavement markings.
2. Unless otherwise indicated the right-of-way line is at the back of the sidewalk.
3. This is a revision to the existing signal built in 1974 under contract NO: WO-479-001-185
4. The signal contractor must coordinate with the roadway contractor for the installation of all signal equipment within the sidewalk and median areas. The roadway contractor will be responsible for the removal and replacement of all disturbed sidewalks, medians and handicap ramps. The conduit under the road shall be installed prior to the first road surface after mill.
5. All existing conduit that is not identified shall be capped and abandoned (See removal sheet).

GEOMETRIC LEGEND

PROPOSED _____
EXISTING — — — — —

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A	A
ELECTRIC	E	E
TELEPHONE	T	T
GAS	G	G
SEWER	S	S
WATER	W	W
CABLE TV	TV	TV

STREET TRAFFIC STUDIES, LTD.
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Ph (410) 590-5500
Fax (410) 590-6637

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REVISIONS				
(B) Refer to Special Provisions AW-678-501-085				5/84
DA				
(C) INSTALL SAMPLING STATION SHA #855-25011019				
SR				
(D) 3-25-96 RECONSTRUCT SIGNAL USING MAST ARMS SHA NO: WO-479-001-185				
RRZ	DAZ	DAZ	BRK	TH 4/1
(E) RECONSTRUCT SIGNAL USING MAST ARMS SHA NO: WD705184				4-13-00
RRZ				

APPROVALS
ASST. CHIEF TEDD SECTION
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF-TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY
ORIGINAL ON FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 528 (COASTAL HWY.) AND 21st ST

DRAWN BY: R.R.ZACHERL	COUNTY: WORCESTER	TS NO. 363E	SHEET NO.
CHECK BY: D.A.NIES	LOG MILE: 23052807.17		
DATE: 1-30-95	F.A.P. NO.	T.I.M.S. NO.	OF
SCALE: 1"=20'	S.H.A. NO. WO-479-001-185		

MAY 05 2000